3-month summary

- The period is most likely to be warm
- The period is slightly more likely than normal to be dry.

3-month likelihood of impact

Temperature

5%	35%	60%
chance the season will be COOL	chance the season will be NEAR AVERAGE	chance the season will be WARM
0.3× ▼ the normal chance	0.6× ▼ the normal chance	3.0× ▲ the normal chance

Precipitation

25%	65%	10%
chance the season will be DRY	chance the season will be NEAR AVERAGE	chance the season will be WET
1.3× ▲ the normal chance	1.1× ▲ the normal chance	0.5× ▼ the normal chance

1-month summary

- August is much more likely to be hot than cool.
- Greater than normal chance of impacts from hot weather, such as heatwaves and wildfires.
- August is slightly more likely to be dry as compared to wet.
- This may mask significant local variations due to the increased likelihood of thunderstorms, which will have the potential to cause localised flash flooding impacts.

1-month likelihood of impact

Temperature

5%	45%	50%
chance the month will be COOL	chance the month will be NEAR AVERAGE	chance the month will be HOT
0.3× ▼ the normal chance	0.8× ▼ the normal chance	2.5× ▲ the normal chance

Precipitation

20%	65%	15%
chance the month will be DRY	chance the month will be NEAR AVERAGE	chance the month will be WET
1.0× ▲▼ the normal chance	1.1× ▲ the normal chance	0.8× ▼ the normal chance

Understanding the Outlook

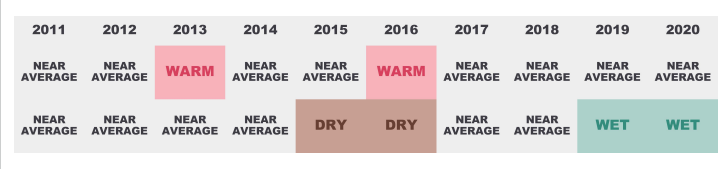
The Outlook uses 3 categories for possible UK temperature and precipitation in the next 1 and 3 months:

COOL, NEAR AVERAGE and WARM for 3-month temperature
COOL, NEAR AVERAGE and HOT for 1-month temperature
WET, NEAR AVERAGE and DRY for precipitation

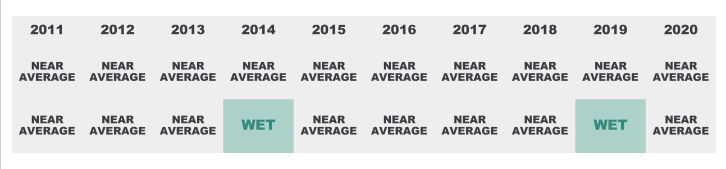
These are linked to observed UK conditions in past years. The NEAR AVERAGE category represents typical conditions for the period and has a normal likelihood of 60%. The higher and lower categories represent more unusual conditions that are more likely to produce impacts. Each has a normal likelihood of 20%.

The Outlook shows how the chances of occurrence of the categories differ from normal, based on knowledge of expected global meteorological patterns. It does not identify which category will actually occur.

Same 3-month period over the last 10 years


2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
NEAR AVERAGE NEAR AVERAGE WARM NEAR AVERAGE NEAR AVERAGE WARM NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE
NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE DRY DRY NEAR AVERAGE NEAR AVERAGE WET WET

Same 1-month period over the last 10 years


2011 2012 2013 2014 2015 2016 2017 2018 2019 2020
NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE
NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE WET NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE NEAR AVERAGE WET NEAR AVERAGE

Outlook in context

Drivers of UK weather for August to October

Global weather patterns can affect UK weather during the coming season and their influence acts to shift the chances of the categories in the Outlook. Drivers relevant to the current Outlook are:

• Sea-surface temperatures around the UK are above average, which, especially during August and September, will favour above average land temperatures.
• Atlantic Tropical Cyclones – the Atlantic tropical cyclone season peaks in September and is forecast to have average to above average activity overall; this acting to reduce confidence in the forecast.

Long-range weather predictions

The Met Office and other prediction centres around the world routinely produce long-range predictions of conditions in the months ahead. The latest signals from these centres are weak and often conflicting, as is typical at this time of year, lowering forecast confidence. The dominant signal, albeit weak, is for high pressure to remain more dominant overall, leading to above average temperatures and a precipitation signal skewed slightly towards dry.

Impact

With this dominant, albeit weak, signal, there is a slight increase in the likelihood of settled weather patterns as compared to unsettled. An increased chance of hot conditions through this period is both consistent with this, and with our warming climate. This raises the potential for further heatwaves and other impacts from hot weather. On a local scale, further impacts from summer thunderstorms, such as flash flooding, remain possible.

Outlook compared to normal likelihood

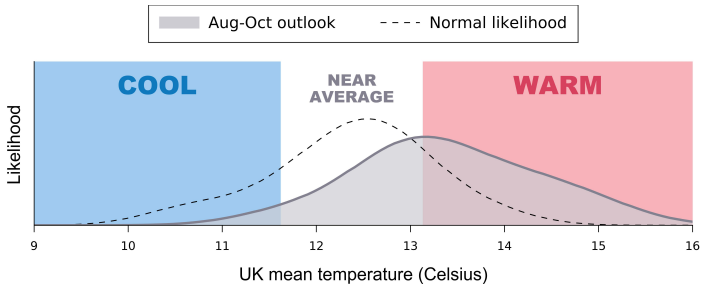
The curves below show the likelihood of the 1- and 3-month average temperature and precipitation taking specific values. In each case:

- The dashed curve shows the normal likelihood based on how often each value has been recorded in past years
- The solid curve shows the current likelihood based on the Outlook for this year

The differences in these curves show how the probabilities for the coming periods differ compared to past years. Where the solid curve (corresponding to this year's Outlook) lies above the dashed curve (normal likelihood), the temperature or precipitation at that point has a greater-than-normal likelihood of occurring. Likewise, wherever it is below the dashed curve, the likelihood of those values is less than normal.

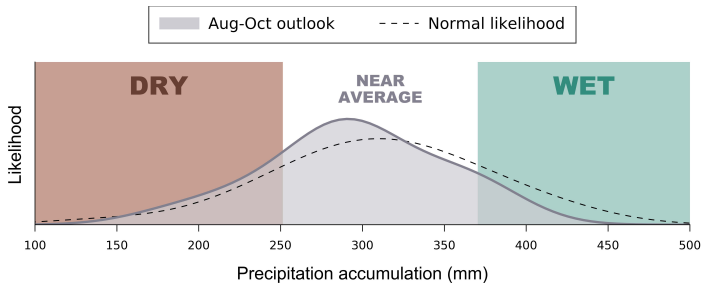
A shift of the solid curve to the left of the dashed curve indicates an increase in the chance of below-average temperature or precipitation. A shift to the right, meanwhile, indicates increased chances of above-average values.

3-month temperature Outlook compared to normal



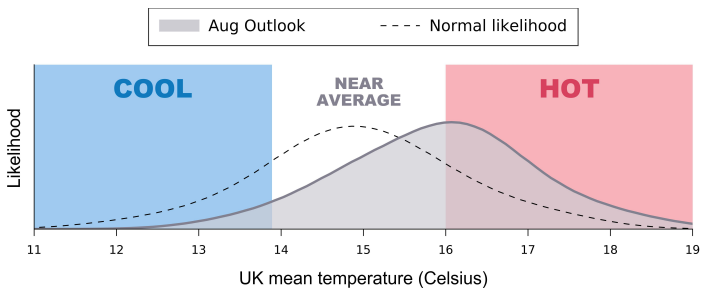
Likelihood leans strongly towards warm conditions

3-month precipitation Outlook compared to normal



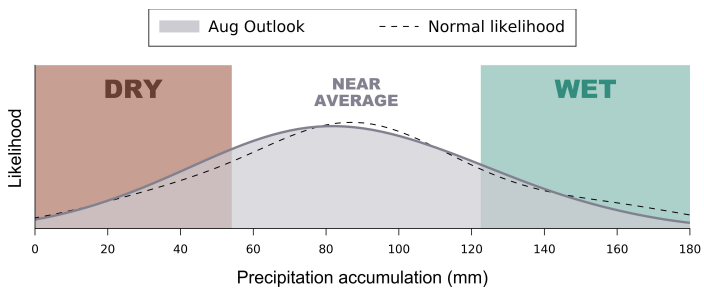
Likelihood leans very slightly towards dry conditions

1-month temperature Outlook compared to normal



Likelihood leans strongly towards hot conditions

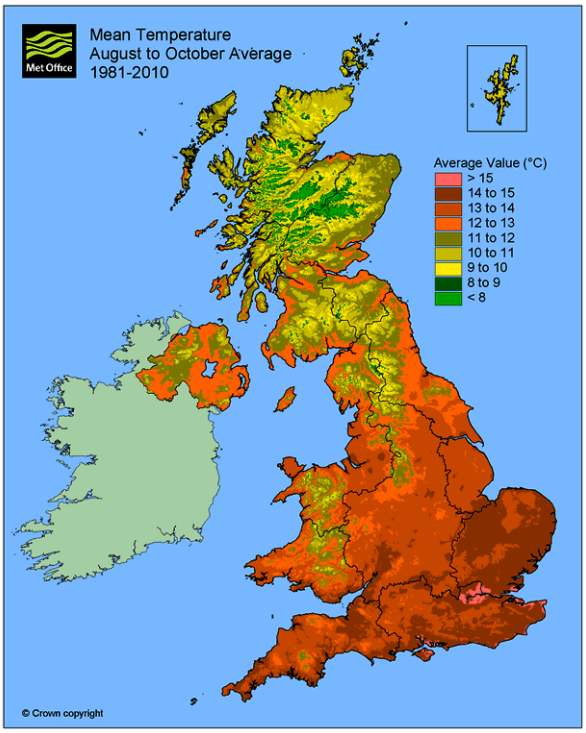
1-month precipitation Outlook compared to normal



Likelihoods of wet and dry are similar to normal

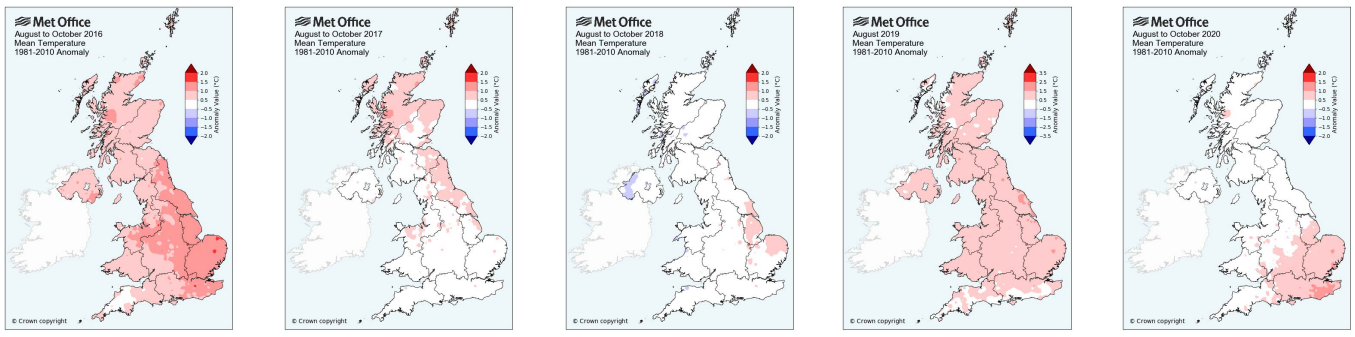
Long-term average temperatures (3-month)

This page shows the long-term average temperatures across the UK for the 3-month Outlook period. Long-term average temperatures for the 1-month period are on page 6. Long-term precipitation averages are shown on pages 7 (3-month) and 8 (1-month).



Average temperatures for August - October based on observations from past years.

Last 5 years' temperatures, difference from average (3-month)



Aug-Oct 2016 | Aug-Oct 2017 | Aug-Oct 2018 | Aug-Oct 2019 | Aug-Oct 2020

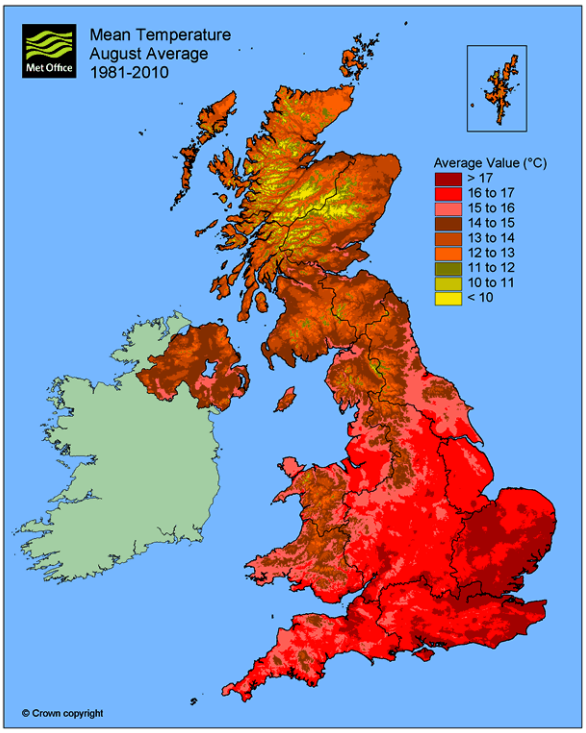
Anomaly (ºC)

< -2.0 | -2.0 to -1.5 | -1.5 to -1.0 | -1.0 to -0.5 | -0.5 to 0.5 | 0.5 to 1.0 | 1.0 to 1.5 | 1.5 to 2.0 | > 2.0

These maps show how August - October temperatures in the last five years differed from the long-term average temperatures shown in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

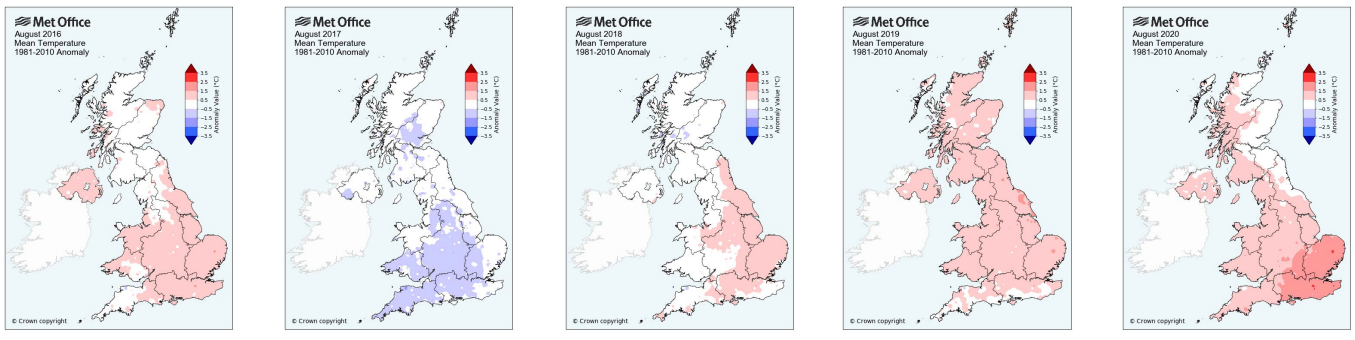
Long-term average temperatures (1-month)

This page shows the long-term average temperatures across the UK for the 1-month Outlook period.



Average temperatures for August based on observations from past years.

Last 5 years' temperatures, difference from average (1-month)



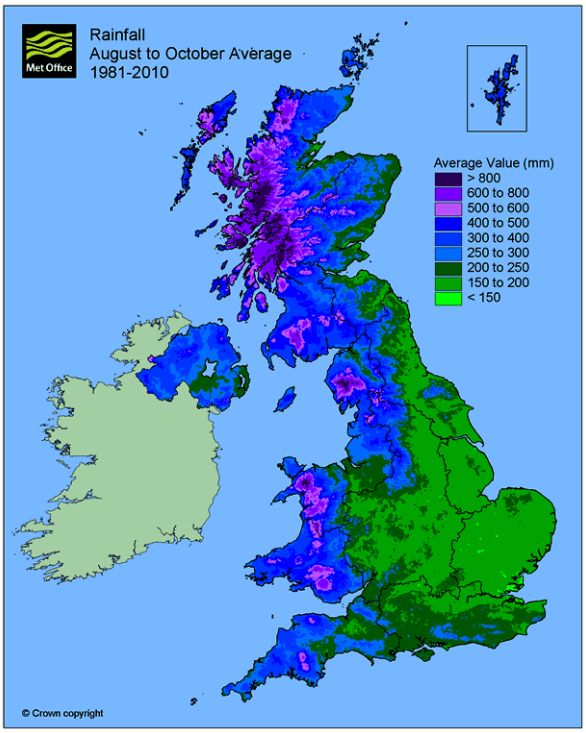
Anomaly (ºC)

< -3.5 | -3.5 to -2.5 | -2.5 to -1.5 | -1.5 to -0.5 | -0.5 to 0.5 | 0.5 to 1.5 | 1.5 to 2.5 | 2.5 to 3.5 | > 3.5

These maps show how August temperatures in the last five years differed from the long-term average temperatures shown in the upper panel. Pink and red colours indicate warmer-than-average conditions while blue shades indicate cooler-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

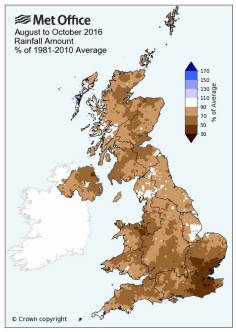
Long-term average precipitation (3-month)

This page shows the long-term average precipitation across the UK for the 3-month Outlook period.

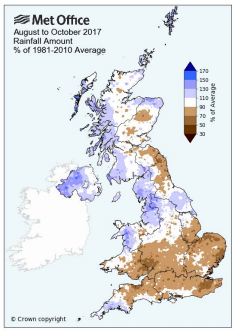


Average precipitation for August - October based on observations from past years.

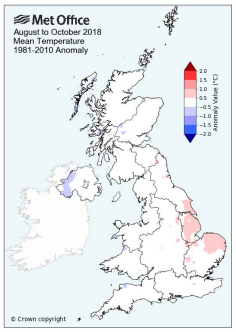
Last 5 years' precipitation, difference from average (3-month)



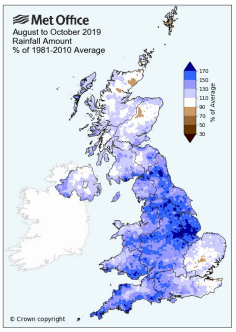
Aug-Oct 2016



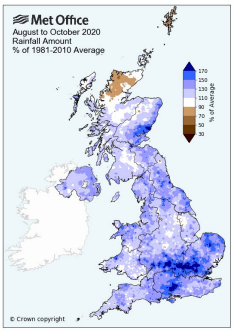
Aug-Oct 2017



Aug-Oct 2018



Aug-Oct 2019



Aug-Oct 2020

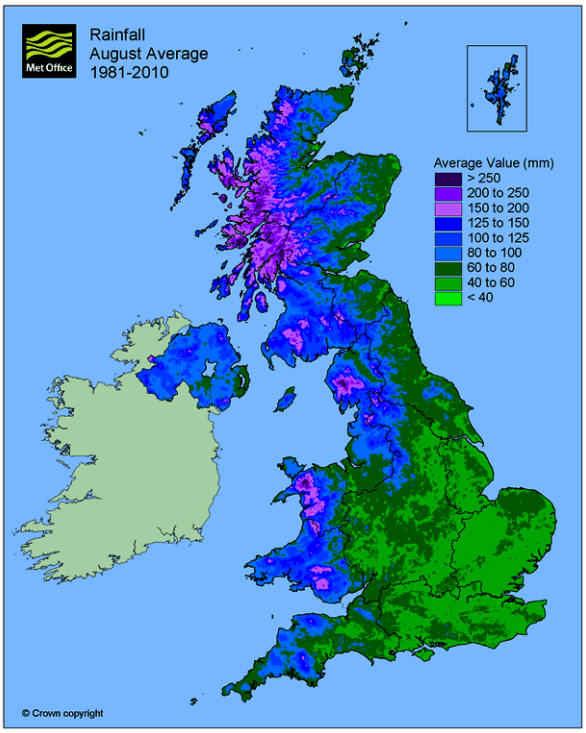
% of average

< 30 | 30 to 50 | 50 to 70 | 70 to 90 | 90 to 110 | 110 to 130 | 130 to 150 | 150 to 170 | > 170

These maps show how August - October precipitation in the last five years differed from the long-term average precipitation shown in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

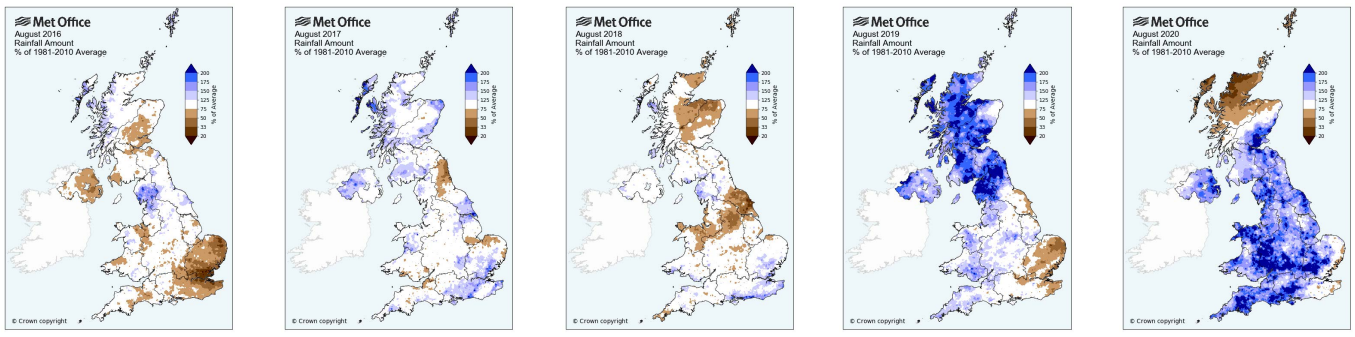
Long-term average precipitation (1-month)

This page shows the long-term average precipitation across the UK for the 1-month Outlook period.



Average precipitation for August based on observations from past years.

Last 5 years' precipitation, difference from average (1-month)



Aug 2016 | Aug 2017 | Aug 2018 | Aug 2019 | Aug 2020

% of average

< 20 | 20 to 33 | 33 to 50 | 50 to 75 | 75 to 125 | 125 to 150 | 150 to 175 | 175 to 200 | > 200

These maps show how August precipitation in the last five years differed from the long-term average precipitation shown in the upper panel. Brown colours indicate drier-than-average conditions while blue shades indicate wetter-than-average conditions. Detailed information on the climate of the UK is available at www.metoffice.gov.uk/climate.

Q&A

Q. What is the point of the Outlook, who is it meant for?
A. This Outlook is produced for planners in government and business who make risk-based decisions. These users are aware of the complexities of this type of outlook and will include those factors in their decision-making process.

Q. How did you decide on the Outlook? What are the main factors affecting it?
A. It is based on information from observations, several numerical prediction systems and expert judgement. See the 'Outlook in Context' section of the Outlook for more details.

Q. Is the Outlook for the whole country?
A. The Outlook is for the average of conditions over the UK as a whole. Regional deviations from the UK average can occur. For example, average UK precipitation can result from below-average rainfall for the northwest and above-average for the southeast.

Q. How confident are you in this Outlook?
A. The percentages in the 'Likelihood of Impact' sections of the Outlook give the level of confidence.

Q. Does this mean we will see an August heatwave?
A. Typically, weather phenomena such as heatwaves do not, as a rule, persist throughout the whole month and therefore the August outlook cannot be used as a guide to the chances of a specific weather type for the whole of the month. While the chances of heatwaves are increased compared to the historical norm, this doesn't preclude cooler spells in the month.

Q. Does the outlook mean that hot and dry conditions will remain in place through September?
A. Although the signals indicate a greater than average chance of warmer conditions through the outlook period, this doesn't rule out the possibility of some cooler conditions, as the outlook looks at probabilities of conditions through the period. In addition, higher than average temperatures can be because of warm nights as much as warm days. Generally, September can see a wide variety of weather conditions and although the signals suggest a higher probability of warmer than average temperatures, it's also worth noting that average temperatures decrease over this period.

About the Outlook

The Outlook presented here is for the United Kingdom as a whole and is based on information from observations, several numerical prediction systems and expert judgement. It is updated monthly to reflect the latest information on global weather patterns and their effect on the UK. The Outlook is designed to be used in conjunction with shorter-range forecasts – detailed weather forecast information is available on the Met Office website (https://www.metoffice.gov.uk).

Information for August will be superseded by the long-range information on the public weather forecast web page, starting from 1 August 2021.

In this product, temperature refers to the average of daytime maxima and night-time minima. All numerical values relate to averages (temperature) or totals (precipitation – rain, sleet, snow and hail) over 1 or 3 months, which are further averaged over the UK land area as a whole. Normal likelihood and long-term averages are established using the period 1981-2010.